

January 2024

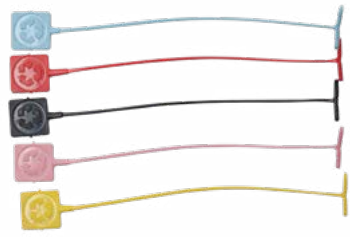
# Ecotach<sup>®</sup> Fasteners Can Lower Landfills

Ecotach fasteners meet the needs of environmentally conscious retailers, brand owners, and consumers who want to reduce their environmental footprint. Switching to these for tag attaching demonstrates brand innovation and environmental responsibility. All Ecotach fasteners can reduce the amount of plastic in landfills.

**The choice is yours.**



## Avery Dennison is Making a Difference



**rPET fasteners** are made of recycled polyethylene terephthalate. The environmental benefits created by using at least 90% “post consumer” waste from recycled plastic bottles (rPET) are substantial:

- Every roll of 834 fasteners reduces the landfill load by more than 8 plastic bottles\*
- Every carton, by more than 52 plastic bottles\*
- Every case, by 528 plastic bottles\*

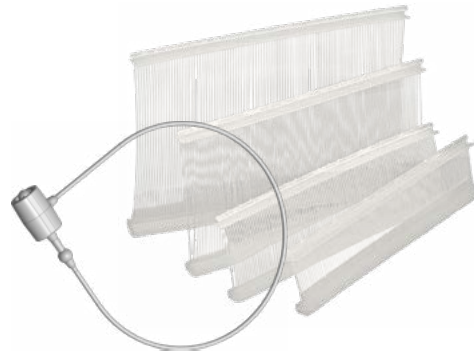
\* The average weight of a single-serve 16.9 oz PET water bottle is 9.9 grams, this is the amount of plastic waste being diverted from the waste stream to our rPET fasteners.



**rPA fasteners** are made of recycled polyamide. We offer two versions, some are made from 30% post consumer waste (PCW) and some are made from 74% PCW, These are available in rolls or clips. The environmental benefit created by using at least 74% PCW from recycled carpet equates to this:

- Every master carton of fasteners eliminates 60 sq ft (5.5 sq meters) of carpet which is equivalent to half the square feet of an average size bedroom in the US\*

\* The average size of a bedroom in the US is 132 sq ft in a home under 2500 sq ft, this is the amount of plastic waste being diverted from the waste stream to our rPA fasteners.



**rPP fasteners** are made using at least 30% recycled polypropylene (rPP) derived from single-use plastic take-out containers. The environmental benefits created by using these tagging fasteners can be impactful.

- An outer container of 30% recycled clip fasteners reduces the landfill by as much as 2.97 lbs (1.346 kg) of single-use plastic take-out containers. This increases to 9.18 lbs (4.16 kg) when purchasing 100% recycled fasteners.
- Customers using over 100 million of 30% recycled clip fasteners annually can reduce the landfill load by as much as 3,260lbs (1,478 kg) of plastic take-out containers each year, increasing to 10,860lbs. (4,926 kg) when purchasing 100% recycled fasteners.
- Customers ordering 1 million recycled Secur-A-Tach fasteners reduces the landfill by as much as 66 lbs (30 kg) of single-use plastic take-out containers. This increases to 661 lbs (300 kg) when purchasing 10 million recycled fasteners.

\* This is the amount of plastic waste being diverted from the waste stream and to our rPP fasteners.



This green box indicates eco-friendly versions of our standard fasteners

**Ecotach Elastic Staples** are made from a proprietary blend of thermoplastic polyurethane material specifically designed to degrade\* at an accelerated rate of 10.63% over 45 days in landfill conditions. The technology used results in no microplastics\* so that when this staple completely degrades, all that is left is carbon dioxide, water, and microbes (biomass). Comparatively speaking, a typical thermoplastic polyurethane fastener would degrade ~0% over the same time frame and take anywhere from 20-30 years to break down, depending on environmental conditions.

Once the Ecotach Elastic Staple is placed into a landfill, naturally occurring bacteria in that environment breaks the fastener down without leaving behind microplastics or any other harmful substances.\* These products are shelf-stable and will not begin to degrade unless put into the designated end-of-life waste stream.

\* We have completed 3rd party ASTM D5511-18 testing that shows that our Ecotach Elastic Staples degrade 10.63% over 45 days in a landfill environment. We do not have data showing how much time it takes for the fasteners to completely degrade.



**Ecotach Plastic Staples fasteners** are made from a proprietary polyurethane material specifically designed to degrade\* at an accelerated rate of 11.91 % over 45 days in landfill conditions. The technology used results in no microplastics\* so that when this staple completely degrades, all that is left is carbon dioxide, water, and microbes (biomass). Comparatively speaking, a typical polyurethane fastener would degrade ~0% over the same time frame and take anywhere from 20 -30 years to break down, depending on environmental conditions.



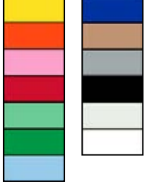
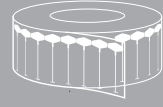

















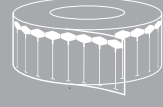

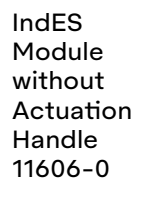


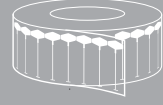


Once the Ecotach Plastic Staple is placed into a landfill, naturally occurring bacteria in that environment breaks the fastener down without leaving behind microplastics or any other harmful substances.\* These products are shelf-stable and will not begin to degrade unless put into the designated end-of-life waste stream.

\* We have completed 3rd party ASTM D5511-18 testing that shows that our Ecotach Elastic Staples degrade 11.91% over 45 days in a landfill environment. We do not have data showing how much time it takes for the fasteners to completely degrade.



## Using Ecotach® Fasteners Reduces Plastic in Landfills

As the original inventors of many innovative fasteners and cable ties, we continue to set the industry standard by offering a complete portfolio of recycled fasteners made from post consumer waste (PCW) to reduce the amount of plastic placed into landfills.

Material Source	Ecotach® Fastener	Waste or Plastic Reduction*	Standard colors	Type	Existing or Suggested Tools	Certification or Testing
		<b>rPET fasteners</b> are made using recycled polyethylene terephthalate. Plastic water bottles are often the post consumer waste (PCW) source.  =11,700 lbs*			 Fine Fabric System 500 Hand Tool 16010-0  Standard System 1000 Hand Tool 10000-4	SCS
		<b>rPA fasteners</b> are made using recycled polyamide, the source is typically nylon carpets. We offer two versions, some are made from 30% PCW and some are made from 70% PCW.  30% PCW =3,900 lbs* 70% PCW =9,100 lbs*	Dark Gray Light Gray Black Gray		 Fine Fabric Mark III Hand Tool 10312-0  Standard System 1000 Hand Tool 10000-4	SCS
		<b>rPP fasteners</b> are made using recycled polypropylene. The recycled content is derived from single-use plastic #5 take-out containers. Percentage of this PCW include 30%, and 100%.  30% PCW =3,260 lbs* 100% PCW =10,860 lbs*	Black Natural	 Hand Applied Single Fasteners	 Fine Fabric Mark III Hand Tool 10312-0  Standard System 1000 Hand Tool 10000-4  Standard Mark III Hand Tool 10651-0	GRS SCS
		<b>StringTach loop fasteners</b> are made using recycled materials. The string component is crafted from 100% PCW Polyester, while the clasp is made from 100% PCW High Impact Polystyrene (rHIPS).  =982 lbs***	White Black	Hand Applied Single Fasteners	Not applicable	GRS
		<b>Elastic staples</b> are made using a proprietary TPU. This results in no microplastics* so that when this staple completely degrades, all that is left is CO <sub>2</sub> , H <sub>2</sub> O, and microbes (biomass).  degrades at 10.63% over 45 days**	Clear		 IndES Module with Actuation Handle 11601-0  IndES Module without Actuation Handle 11606-0	ASTM D5511-18
		<b>Plastic staples</b> are made using a proprietary TPU. This results in no microplastics* so that when this staple completely degrades, all that is left is CO <sub>2</sub> , H <sub>2</sub> O, and microbes (biomass).  degrades at 11.91% over 45 days**	Clear		 ST9500 Plus Machine Narrow Needle Guard 15000-2  ST9500 Plus Machine Wide Needle Guard 15000-3	ASTM D5511-18

\* Approximate values based on virgin plastic used per 100 million (2-3") rPP, rPA or rPET clip fasteners, This would result in the amount of plastic waste being diverted from the waste stream to our Ecotach fasteners

\*\* We have completed 3rd party ASTM D5511-18 testing that shows that our staples degrade at this percentage over 45 days in a landfill environment. We do not have data showing how much time it takes for the fasteners to completely degrade.

\*\*\* Approximate value based on part# RSTRING210-WHT at a 1 million order quantity

## Ecotach® Recycled Polypropylene (rPP) Fasteners

[view online](#)



Recycled Polypropylene (rPP) Clip Fasteners					
Size		Class	Color	30% PCW Part #	100% PCW Part#
MM	Inches				
7	0.25	Fine Fabric	Natural	RPP3FT7-NAT	RPP10FT7-NAT
7	0.25	Fine Fabric	Black	RPP3FT7-BLK	
13	0.50	Fine Fabric	Natural	RPP3FP13-NAT	RPP10FP13-NAT
13	0.50	Fine Fabric	Black	RPP3FP13-BLK	
17	0.67	Fine Fabric	Natural	RPP3FP17-NAT	RPP10FP17-NAT
17	0.69	Fine Fabric	Black	RPP3FP17-BLK	
25	1.00	Fine Fabric	Natural	RPP3FP25-NAT	RPP10FP25-NAT
25	1.00	Fine Fabric	Black	RPP3FP25-BLK	
50	2.00	Fine Fabric	Natural	RPP3FP50-NAT	RPP10FP50-NAT
50	2.00	Fine Fabric	Black	RPP3FP50-BLK	
70	2.75	Fine Fabric	Natural	RPP3FP70-NAT	RPP10FP70-NAT
70	2.75	Fine Fabric	Black	RPP3FP70-BLK	
25	1.00	Standard	Natural	RPP3SP25-NAT	RPP10SP25-NAT
25	1.00	Standard	Black	RPP3SP25-BLK	
40	1.56	Standard	Natural	RPP3SP40-NAT	RPP10SP40-NAT
40	1.56	Standard	Black	RPP3SP40-BLK	
50	2.00	Standard	Natural	RPP3SP50-NAT	RPP10SP50-NAT
50	2.00	Standard	Black	RPP3SP50-BLK	
65	2.57	Standard	Natural	RPP3SP65-NAT	RPP10SP65-NAT
65	2.57	Standard	Black	RPP3SP65-BLK	



Recycled Polypropylene (rPP) Secur-A-Tach® Loop Fasteners			
Size		Color	30% PCW Part#
MM	Inches		
76	3.00	Black	17146-0
76	3.00	Natural	17150-0
127	5.00	Black	17147-0
127	5.00	Natural	17151-0
178	7.00	Black	17148-0
178	7.00	Natural	17152-0
229	9.00	Black	17149-0
229	9.00	Natural	17153-0

## Quantifiable & Reportable Plastic Savings Example

Switching to our Ecotach® recycled polypropylene (rPP) tagging solution can make a big impact on plastic waste when compared to using virgin polypropylene (PP) fasteners.

By purchasing Avery Dennison's rPP fasteners you help our planet in two ways:

1. Remove and repurpose plastic waste from the waste stream.
2. Close the Circle – We mindfully innovate aiming for truly sustainable solutions. We consider the entire value chain and support the companies that gather, clean, and re-pelletize the world's plastic waste.

Our 30% and 100% rPP products are designed to maximize our recycled content, while maintaining the product performance our customers need. Our rPP fasteners meet the same specifications as our virgin fasteners in the following important ways:

- ✓ Reliable Tensile Strength
- ✓ Optimal Shelf-Life
- ✓ Low T-Bar Fly-Off Rates



\*if ordering the 100% rPP 65mm standard fasteners at 1B quantity, this results in 49,260 kgs of plastic waste being diverted from the waste stream to our Ecotach rPP fasteners

### 100% rPP

#### 50mm

original PP fasteners  
Volume tier Total Annual Plastic Waste  
1 Billion ..... ≈ 49,260 kgs  
≈ 108,600 lbs

#### 65mm

original PP fasteners  
Volume tier Total Annual Plastic Waste  
1 Billion ..... ≈ 49,260 kgs  
≈ 108,600 lbs

### 30% rPP

#### 50mm

original PP fasteners  
Volume tier Total Annual Plastic Waste  
1 Billion ..... ≈ 14,787 kgs  
≈ 32,600 lbs

#### 65mm

original PP fasteners  
Volume tier Total Annual Plastic Waste  
1 Billion ..... ≈ 14,787 kgs  
≈ 32,600 lbs

Ecotach® Recycled Polyamide (rPA) Fasteners

[view online](#)



Recycled Polyamide (rPA) Clip Fasteners					
Size		Class	Color/PMS	30% PCW Part#	74% PCW Part#
MM	Inches				
13	0.50	Fine Fabric	Black		17160-0
13	0.50	Fine Fabric	LT Gray/431C		17050-0
13	0.50	Fine Fabric	DK Gray/432C		17051-0
25	1.00	Fine Fabric	Black		17161-0
25	1.00	Fine Fabric	DK Gray/432C		17055-0
25	1.00	Fine Fabric	LT Gray/431C		17056-0
35	1.38	Fine Fabric	DK Gray/432C		17057-0
35	1.38	Fine Fabric	LT Gray/431C		17058-0
45	1.77	Fine Fabric	DK Gray/432C		17059-0
50	2.00	Fine Fabric	LT Gray/431C		17052-0
50	2.00	Fine Fabric	DK Gray/432C		17053-0
50	2.00	Fine Fabric	LT Gray/431C		17054-0
50	2.00	Fine Fabric	Black		17164-0
13	0.50	Standard	Black		17190-0
25	1.00	Standard	Black		17191-0
25	1.00	Standard	DK Gray		17045-0
50	2.00	Standard	DK Gray		17192-0



Ecotach® Recycled Polyethylene Terephthalate (rPET) Fasteners

[view online](#)

Recycled Polyamide (rPET) Reel Fasteners					
Size		Class	Color/PMS		90% PCW Part#
MM	Inches				
51	2.00	Standard/System 1000	Natural		17015-0
51	2.00	Standard/System 1000	Black/Black		17016-0
51	2.00	Standard/System 1000	White/White		17017-0
76	3.00	Standard/System 1000	White/White		17001-0
76	3.00	Standard/System 1000	Yellow/107C		17002-0
76	3.00	Standard/System 1000	Orange/172C		17003-0
76	3.00	Standard/System 1000	Pink/210C		17004-0
76	3.00	Standard/System 1000	Red/186C		17005-0
76	3.00	Standard/System 1000	LT Green/346C		17006-0
76	3.00	Standard/System 1000	Green/347C		17007-0
76	3.00	Standard/System 1000	LT Blue/291C		17008-0
76	3.00	Standard/System 1000	DK Blue/286C		17009-0
76	3.00	Standard/System 1000	Brown/4655C		17010-0
76	3.00	Standard/System 1000	Gray/429C		17011-0
76	3.00	Standard/System 1000	Black/Black		17012-0
76	3.00	Standard/System 1000	Natural		17013-0
51	2.00	Fine Fabric/System 500	Natural		17041-0
51	2.00	Fine Fabric/System 500			17042-0
51	2.00	Fine Fabric/System 500	White/White		17043-0



Recycled Polyamide (rPA) System 1000 Reel Fasteners				
Size		Class	Color/PMS	30% PCW Part#
MM	Inches			
11	0.43	System 1000	Gray	17180-0
13	0.50	System 1000	Gray	17181-0
19	0.76	System 1000	Gray	17182-0
26	1.02	System 1000	Gray	17183-0
32	1.25	System 1000	Gray	17184-0
42	1.65	System 1000	Gray	17185-0
44	1.73	System 1000	Gray	17186-0
51	2.02	System 1000	Gray	17187-0

# Ecotach® Degradable Staples

[view online](#)

Test Standard:  
ASTM D5511-18

Elastic Staple®			
Size		Class	Ecotach Part#
MM	Inches		
15	0.59	Standard	11750-0
19	0.75	Standard	11751-0
25	0.98	Standard	11752-0
30	1.18	Standard	11753-0
33	1.30	Standard	11754-0
37	1.61	Standard	11755-0
41	1.63	Standard	11756-0
44	1.73	Standard	11757-0
50	1.97	Standard	11758-0
54	2.13	Standard	11759-0
58	2.29	Standard	11760-0
64	2.52	Standard	11761-0
68	2.68	Standard	11762-0
73	2.87	Standard	11763-0
75	2.95	Standard	11764-0
80	3.15	Standard	11765-0
85	3.35	Standard	11766-0
90	3.54	Standard	11767-0
95	3.74	Standard	11768-0
100	3.94	Standard	11769-0
110	4.33	Standard	11770-0
120	4.75	Standard	11771-0
130	5.12	Standard	11772-0
140	5.50	Standard	11773-0
150	5.90	Standard	11774-0
165	6.50	Standard	11775-0
180	7.09	Standard	11776-0
200	7.87	Standard	11777-0

Test Standard:  
ASTM D5511-18

Plastic Staple®			
Size		Class	Ecotach Part#
MM	Inches		
13	0.51	Standard	15025-0

[view online](#)

# Ecotach® Recycled StringTach™ Fasteners

[view online](#)

GRS  
Certified

StringTach™			
Size		Color	Ecotach Part#
MM	Inches		
130	5.12	White	RSTRING130-WHT
130	5.12	Black	RSTRING130-BLK
210	8.26	White	RSTRING210-WHT
210	8.26	Black	RSTRING210-BLK



[view online](#)

---

## For More Information about Our Sustainability Efforts

For more information on Avery Dennison's sustainability efforts visit [esg.averydennison.com](https://esg.averydennison.com)

### For more information on our fastener solutions, contact us:

USA & Canada: +1 978 345 8100

Latin America: +52 (81) 3348 0700

Asia Pacific: +852 2372 3000

Europe, Middle East & Africa: +(44) 1628 859500

[fastener.averydennison.com](https://fastener.averydennison.com)

[fastener@averydennison.com](mailto:fastener@averydennison.com) ✉

1/2024



© 2024 Avery Dennison Corporation. All rights reserved. Data was collected according to Avery Dennison test methods and standards. Testing should be confirmed by the customer. All statements, technical information and recommendations concerning products sold or samples provided by AVERY DENNISON are based upon tests believed to be reliable but do not constitute a guarantee or warranty. All products are sold and samples of products provided with the understanding that Customer has independently determined the suitability of such products for its purposes.